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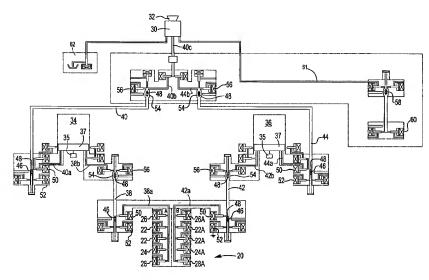
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(54) Title: PAINT DELIVERY AND APPLICATION SYSTEM AND METHOD



(57) Abstract: A paint delivery and application system including a color changer (20), at least two paint cannisters (34, 36) and a paint applicator (30), a first pair of supply lines (38, 42) connected between the color changer (20) and the paint cannisters (34, 36) and a second pair of supply lines connecting the paint cannisters and the paint applicator (30), wherein the paint cannisters operate in tandem permitting delivery of a first paint to one of the paint cannisters while a second paint cannister is electrically isolated from the color changer (20) and is delivering paint to the applicator (30). In one disclosed embodiment, the delivery line from the paint cannisters to the applicator includes two pigs and solvent is delivered between the pigs, such that this system is self purging.

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X	EP 1172152 A1 (BAUMANN, MICHAEL) 16 Janua document.		1-28	
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